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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,035	09/23/2003	Michael B. North Morris	10021225-1	1812

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EXAMINER

LEE, HWA S

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/669,035	MORRIS, MICHAEL B. NORTH	
	Examiner Andrew Hwa S. Lee	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 September 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 9/23/03.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Curbelo et al (US 5,657,122).

With regards to **claim 1**, Curbelo et al (Curbelo hereinafter) show a preferred optical alignment in a scanning interferometer and also shows in the prior art:

- (a) placing a reference signal (30a-c) into a reference signal path (to mirror 17) of the wavelength meter (7);
- (b) placing the reference signal (30-a-c) into an unknown signal path (to mirror 18) of the wavelength meter (7); and,
- (c) detecting (32a-c, 22) whether after traveling through the unknown signal path, the reference signal has a same phase (e.g. column 5, line 7+) as after traveling through the reference signal path.

Although Curbelo does not expressly state the term “period,” one of ordinary skill in the art would understand that phase and period are interchangeable as referring to the characteristic

of the interference signal. Other characteristics of the interferometer signal can be observed such as zero crossings, peak/trough differences between two signals, but all of them

With regards to **claim 2**, Curbelo shows sampling values of the reference signal after traveling through the unknown signal path, based on frequency of the reference signal after traveling through the reference signal path to determine whether the sampled values are at constant amplitude since the amplitude is monitored (column 4, lines 4-21).

With regards to **claim 3**, Official Notice is taken that notifying a user of misalignment by displays or alarms are well known, and the time of the invention, one of ordinary skill in the art would have used a system for notification in order to notify the user information that is relevant to the user such as misalignment, exceeding working range, etc.

With regards to **claim 4**, Curbelo shows (d) performing realignment (35a-c) of the wavelength meter when after traveling through the unknown signal path, the reference signal has a different period than after traveling through the reference signal path.

With regards to **claim 5**, Curbelo shows the wavelength meter includes a Michelson interferometer (column 3, line 14).

With regards to **claim 6**, Curbelo shows translating a mirror (17, 18) in both the unknown signal path and in the reference signal path while detecting whether after traveling through the

unknown signal path, the reference signal has the same period as after traveling through the reference signal path.

With regards to **claim 7**, Curbelo shows:

- a reference signal path (path to/from mirror 17);
- an unknown signal path (path to/from mirror 18);
- a detector (32a-c) that detects signal activity on the reference signal path and signal activity on the unknown signal path; and
- an analyzer (22) that determines whether, after traveling through the unknown signal path, a reference signal has a same phase as after traveling through the reference signal path.

Although Curbelo does not expressly state the term “period,” one of ordinary skill in the art would understand that phase and period are interchangeable as referring to the characteristic of the interference signal

With regards to **claim 8**, Curbelo shows the analyzer checks values of the reference signal sampled by the detector after traveling through the unknown signal path, based on frequency of the reference signal after traveling through the reference signal path, to determine whether the sampled values are at constant amplitude since the amplitude is monitored (column 4, lines 4-21).

With regards to **claim 9**, Official Notice is taken that notifying a user of misalignment by displays or alarms are well known, and the time of the invention, one of ordinary skill in the art

would have used a system for notification in order to notify the user information that is relevant to the user such as misalignment, exceeding working range, etc.

With regards to **claim 10**, Curbelo shows the wavelength meter performs realignment (35a-c) of the wavelength meter when after traveling through the unknown signal path, the reference signal has a different period than after traveling through the reference signal path.

With regards to **claim 11**, Curbelo shows the wavelength meter includes a Michelson interferometer (column 3, line 14).

With regards to **claim 12**, the same rejection applies as the rejection of claim 8.

With regards to **claim 13**, Curbelo shows the wavelength meter includes a mirror (17, 18) that is translated while the detector detects signal activity on the reference signal path and signal activity on the unknown signal path.

With regards to **claim 14**, Curbelo shows:

reference signal path means for guiding a signal (path to/from mirror 17);
unknown signal path means for guiding a signal (path to/from mirror 18);
detector means for detecting signal activity on the reference signal path means and signal activity on the unknown signal path means; and
analyzer means for determining whether, after traveling through the unknown signal path means, a reference signal has a same phase as after traveling through the reference signal path means.

Although Curbelo does not expressly state the term “period,” one of ordinary skill in the art would understand that phase and period are interchangeable as referring to the characteristic of the interference signal

With regards to **claim 15**, Curbelo shows the analyzer means checks values of the reference signal sampled by the detector means after traveling through the unknown signal path means, based on frequency of the reference signal after traveling through the reference signal path means, to determine whether the sampled values are at constant amplitude since the amplitude is monitored (column 4, lines 4-21).

With regards to **claim 16**, Official Notice is taken that notifying a user of misalignment by displays or alarms are well known, and the time of the invention, one of ordinary skill in the art would have used a system for notification in order to notify the user information that is relevant to the user such as misalignment, exceeding working range, etc.

With regards to **claim 17**, Curbelo shows the wavelength meter performs realignment (35a-c) of the wavelength meter when after traveling through the unknown signal path, the reference signal has a different period than after traveling through the reference signal path.

With regards to **claim 18**, Curbelo shows the wavelength meter includes a

Michelson interferometer (column 3, line 14).

With regards to **claim 19**, Curbelo shows the analyzer means is also for checking values of the reference signal sampled by the detector means to determine whether the sampled values are at constant amplitude since the amplitude is monitored (column 4, lines 4-21).

With regards to **claim 20**, Curbelo shows the wavelength meter includes a mirror (17, 18) that is translated while the detector detects signal activity on the reference signal path and signal activity on the unknown signal path.

Conclusion

Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. *In re Selmi*, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); *In re Fischer*, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable

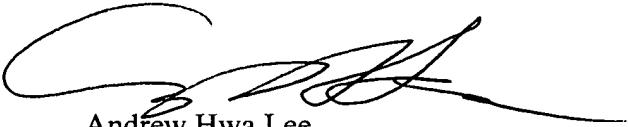
during prosecution. Thus, applicant is charged with rebutting the well-known statement in the next reply after the Office action in which the well known statement was made.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,219,146 and US 4,444, 501.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Hwa Lee
Primary Examiner
Art Unit 2877